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09/657,149	09/07/2000	Chris Hemmings	P65929US0	9961

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EXAMINER	
VU, THANH T	

ART UNIT	PAPER NUMBER
2174	9

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/657,149	HEMMINGS, CHRIS	
	Examiner	Art Unit	
	Thanh T. Vu	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-12,15-21 and 23-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-12,15-21 and 23-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

Claims 11, 12, 16, 28, 29, 31, 40, 41 are objected to because of the following informalities:

Claims 11, 12, 16, 28, 29, 31, 40, 41 the word "centre" should be -- center--.

Claims 12, 29, 41 the word "travelling" should be -- traveling--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 8, 9, 10, 11, 15, 17, 23-28, 30, 32, 37-40, 42 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Robertson et al. ("Robertson", U.S. Pat. No. 6,486,895).

Per claim 8, Robertson teaches a user interface including a page-turn for a multiple page document comprising:

a screen display of a first page of image or text (figs. 3 and 10-11);

means for detecting a request from a user for a subsequent page of image or text (figs. 3 and 10-11; col. 8, lines 50-60);

a page-turn comprising an animated sequence of frames displayed throughout the transition between said first and subsequent pages of image or text (col. 8, lines 50-60); and

wherein said animated sequence reveals less of the subsequent page beneath the first page at the commencement of the animated sequence with respect to time than when the first page approaches a position representing the page orthogonal to the axis of rotation of the first page (col. 8, lines 50-60; col. 9, lines 6-28 and lines 45-58).

Per claim 9, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 8 wherein the position of the first page in a frame of said animated sequence is calculated with respect to elapsed time during a predetermined total time for completion of the page-turn (col. 8, lines 50-60; col. 9, lines 45-58).

Per claim 10, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 9 wherein said predetermined time for completion of the page-turn is selectable by a user (col. 9, lines 45-58).

Per claim 11, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 8 wherein an edge of said turning page distal from said center of rotation increasingly stretches along an axis parallel to said axis of rotation as said edge approaches the axis of rotation (figs. 10-12; col. 9, lines 7-28).

Per claim 15, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 9 wherein the position of the first page in a frame of said animated sequence is calculated with respect to elapsed time assuming constant rotation of the turning page to achieve completion of the page-turn in said predetermined time (col. 9, lines 45-58).

Per claim 17, Robertson teaches a user interface including a page-turn for a multiple page document comprising:

a screen display of a first page of image or text (figs. 3 and 10-11);

means for detecting a request from a user for a subsequent page of image or text (figs. 3 and 10-11; col. 8, lines 50-60);

a page-turn comprising an animated sequence of frames displayed throughout the transition between said first and subsequent pages of image or text (col. 8, lines 50-60); and

wherein said image or text is mapped to a turning page during said animated sequence by mapping pixels from the original page in its unturned state to corresponding positions on said turning page (figs. 10-12; col. 8, lines 50-60; col. 9, lines 6-28).

Claim 23 is rejected under the same rationale as claim 8.

Claim 24 is rejected under the same rationale as claim 17.

Claims 25, 26, 27, 28, 30 are rejected under the same rationale as claim 8, 9, 10, 11, 15 respectively.

Claim 32 is rejected under the same rationale as claim 17.

Claims 37, 38, 39, 40, 42 are rejected under the same rationale as claim 8, 9, 10, 11, 15 respectively.

Claim 44 is rejected under the same rationale as claim 17.

Claims 18, 33, 45 rejected under 35 U.S.C. 102(e) as anticipated by Robertson et al. ("Robertson", U.S. Pat. No. 6,486,895) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Robertson et al. ("Robertson", U.S. Pat. No. 6,486,895) in view of Yagita et al. ("Yagita", U.S. Pat. No. 5,900,876).

Per claim 18, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 17 wherein said image or text on said turning page compresses in a direction orthogonal to the axis of rotation and simultaneously expands in a direction parallel to the axis of rotation as the turning page moves from an original position to a position orthogonal to the axis of rotation (figs. 10-12; col. 8, lines 50-60; col. 9, lines 6-28; text or image on the turning pages of figs. 10-12 appears to be compressed).

Robertson does not explicitly describe said image or text on said turning page compresses in a direction orthogonal to the axis of rotation and simultaneously expands in a direction parallel to the axis of rotation as the turning page moves from an original position to a position orthogonal to the axis of rotation. However, Yagita teaches said image or text on said turning page compresses in a direction orthogonal to the axis of rotation and simultaneously expands in a direction parallel to the axis of rotation as the turning page moves from an original position to a position orthogonal to the axis of rotation (fig. 22; col. 9, lines 12-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Yagita in the invention of Robertson because it provides users a realistic feeling of turning pages of a book.

Claim 33 is rejected under the same rationale as claim 18.

Claim 45 is rejected under the same rationale as claim 18.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12, 16, 19, 29, 31, 34, 41, 43, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. ("Robertson", U.S. Pat. No. 6,486,895) in view of Henckel et al. ("Henckel", U.S. Pat. No. 5,463,725).

Per claim 12, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 8, but does not teach said first page is represented as a convex surface when traveling between a starting position and the position in line with the center of rotation of the first page. However, Henckel teaches said first page is represented as a convex surface when traveling between a starting position and the position in line with the center of rotation of the first page (fig. 2; col. 2, 51-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Henckel in the invention of Robertson because it provides users an interface to be similar as possible to the use of actual paper reading materials such as books or magazines.

Claim 29 is rejected under the same rationale as claim 12.

Claim 41 is rejected under the same rationale as claim 12.

Per claim 16, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 11, but does not teach said edge of said turning page distal from said center of rotation stretches along an axis parallel to said axis of rotation such that the upper and lower comers of the page transcribe an elliptical path outside the area of a non-turning page. However, Henckel teaches said edge of said turning page distal from said center of rotation stretches along an axis parallel to said axis of rotation such that the upper and lower comers of the page transcribe an elliptical path outside the area of a non-turning page (fig. 2; col. 2, 51-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Henckel in the invention of Robertson because it provides users an interface to be similar as possible to the use of actual paper reading materials such as books or magazines.

Claim 31 is rejected under the same rationale as claim 16.

Claim 43 is rejected under the same rationale as claim 16.

Per claim 19, Robertson teaches a user interface including a page-turn for a multiple page document as claimed in claim 18 but do not teach said turning page is presented in a convex manner and said image or text is mapped to corresponding positions on the convex page. However, Henckel teaches said turning page is presented in a convex manner and said image or text is mapped to corresponding positions on the convex page (fig. 2; col. 2, 51-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Henckel in the invention of Robertson because it provides users an

interface to be similar as possible to the use of actual paper reading materials such as books or magazines.

Claim 34 is rejected under the same rationale as claim 19.

Claim 46 is rejected under the same rationale as claim 19.

Claim 19, 34, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. ("Robertson", U.S. Pat. No. 6,486,895) in view of Yagita et al. ("Yagita", U.S. Pat. No. 5,900,876) and further in view of Henckel et al. ("Henckel", U.S. Pat. No. 5,463,725).

Per claim 19, Robertson and Yagita teach a user interface including a page-turn for a multiple page document as claimed in claim 18 but do not teach said turning page is presented in a convex manner and said image or text is mapped to corresponding positions on the convex page. However, Henckel teaches said turning page is presented in a convex manner and said image or text is mapped to corresponding positions on the convex page (fig. 2; col. 2, 51-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Henckel in the invention of Robertson and Yagita because it provides users an interface to be similar as possible to the use of actual paper reading materials such as books or magazines.

Claim 34 is rejected under the same rationale as claim 19.

Claim 46 is rejected under the same rationale as claim 19.

Claims 20-21, 35-36, 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. ("Robertson", U.S. Pat. No. 6,486,895) in view of Motamed et al. ("Motamed", U.S. Pat. No. 5,646,751).

Per claim 20 and 21, Robertson teaches a user interface including a page-tum for a multiple page document as claimed in claim 17, but does not teach the colour of a pixel on a turning page is calculated by averaging the values of an uneven number of pixels from an original page or a single pixel from an original page may be mapped and averaged to an uneven number of pixels on the turning page and said text on said turning page undergoes anti-aliasing techniques to blend pixel values across pixel boundaries. However, Motamed teaches the colour of a pixel on a turning page is calculated by averaging the values of an uneven number of pixels from an original page or a single pixel from an original page may be mapped and averaged to an uneven number of pixels on the turning page (col. 2, lines 15-30) and said text on said turning page undergoes anti-aliasing techniques to blend pixel values across pixel boundaries (col. 2, lines 30-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Motamed in the invention of Robertson because it provides users a method to speed up the process of color conversion of the information on the turning page.

Claims 35-36 are rejected under the same rationale as claim 20-21.

Claims 47-48 are rejected under the same rationale as claim 20-21.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (703)-308-9119. The examiner can normally be reached on Mon-Thur and every other Fri 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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01/07/04